

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

In the Claims:

Claims 1-31 (Canceled).

Claim 32 (Currently Amended): A transgenic monocot plant wherein at least part of said plant comprises a recombinant nucleic acid comprising a promoter active in said part operably linked to a nucleic acid molecule encoding a thioredoxin h polypeptide wherein said promoter is a seed or grain maturation-specific promoter.

Claim 33 (Original): The transgenic plant of claim 32 wherein said part is a seed.

Claim 34 (Original): The transgenic plant of claim 32 wherein said part is a grain.

Claim 35 (Canceled).

Claim 36 (Currently Amended): The transgenic plant of claim ~~35~~ 32 wherein said promoter is selected from the group consisting of rice glutelins, rice oryzins, rice prolamines, barley hordeins, wheat gliadins, wheat glutelins, maize zeins, maize glutelins, oat glutelins, sorghum kasirins, millet pennisetins, rye secalins, and a maize embryo-specific globulin promoter.

Claim 37 (Original): The transgenic plant of claim 36 wherein said barley hordein promoter is selected from the group consisting of 131 hordein and D hordein promoters.

Claim 38 (Original): The transgenic plant of claim 32 wherein said plant is selected from the group consisting of rice, barley, maize, wheat, oat, rye, sorghum, millet, triticale, turf grass and forage grass.

Claim 39 (Canceled).

Claim 40 (Currently Amended): The transgenic plant of claim ~~39~~ 32 wherein said thioredoxin h is barley, wheat, tobacco, rice, Brassica, Arabidopsis, Picea, or soy bean thioredoxin h.

Claim 41 (Original): The transgenic plant of claim 32 wherein said recombinant nucleic acid further comprises a nucleic acid molecule encoding a signal peptide operably linked to said promoter and said nucleic acid molecule encoding a thioredoxin protein.

Claim 42 (Original): The transgenic plant of claim 41 wherein said signal peptide targets expression of the thioredoxin polypeptide to an intracellular body.

Claim 43 (Original): The transgenic plant of claim 42 wherein said signal peptide is selected from the group consisting of barley B1 hordein and D hordein signal peptides.

Claims 44-76 (Canceled).

Claim 77 (Currently Amended): A transgenic seed or grain comprising a recombinant nucleic acid comprising a promoter active in said seed or grain operably linked to a nucleic acid molecule encoding thioredoxin h polypeptide wherein said promoter is a seed or grain maturation-specific promoter.

Claim 78 (Canceled).

Claim 79 (Currently Amended): The transgenic seed or grain of claim ~~78~~ 77 wherein said promoter is selected from the group 74 consisting of rice glutelins, rice oryzins, rice prolamines, barley hordeins, wheat gliadins, wheat glutelins, maize zeins, maize glutelins, oat glutelins, sorghum kasirins, millet pennisetins, rye secals, and a maize embryo-specific globulin.

Claim 80 (Original): The transgenic seed or grain of claim 79 wherein said barley hordein promoter is selected from the group consisting of B1 hordein and D hordein promoters.

Claim 81 (Original): The transgenic seed or grain of claim 80 wherein said seed or grain is selected from the group consisting of rice, barley, maize, wheat, oat, rye, sorghum, millet, and triticale seed or grain.

Claim 82 (Canceled).

Claim 83 (Currently Amended): The transgenic seed or grain of claim ~~82~~ 77 wherein said thioredoxin h is barley, wheat, tobacco, rice, soy bean, Brassica, Picea, or Arabidopsis thioredoxin h.

Claim 84 (Original): The transgenic seed or grain of claim 77 wherein said recombinant nucleic acid further comprises a nucleic acid molecule encoding a signal peptide operably linked to said promoter and said nucleic acid molecule encoding a thioredoxin protein.

Claim 85 (Original): The transgenic seed or grain of claim 84 wherein said signal peptide targets expression of the thioredoxin polypeptide to an intracellular body.

Claim 86 (Original): The transgenic seed or grain of claim 85 wherein said signal peptide is selected from the group consisting of barley B1 hordein and D hordein signal peptides.

Claims 87-111 (Canceled).

Claim 112 (New): The transgenic plant of claim 32 wherein said plant is wheat.

Claim 113 (New): The transgenic plant of claim 112 wherein said thioredoxin is wheat thioredoxin *h*.

Claim 114 (New): The transgenic seed or grain of claim 81 wherein said seed or grain is barley.

Claim 115 (New): The transgenic seed or grain of claim 114 wherein said thioredoxin is barley thioredoxin *h*.

Claim 116 (New): The transgenic seed or grain of claim 81 wherein said seed or grain is wheat.

Claim 117 (New): The transgenic seed or grain of claim 116 wherein said thioredoxin is wheat thioredoxin *h*.

Claim 118 (New): The transgenic plant of claim 32 wherein said thioredoxin is *Arabidopsis* thioredoxin *h*.

Claim 119 (New): The transgenic plant of claim 32 wherein said thioredoxin is soybean thioredoxin *h*.

Claim 120 (New): The transgenic monocot seed or grain of claim 77 wherein said thioredoxin is *Arabidopsis* thioredoxin *h*.

Claim 121 (New): The transgenic monocot seed or grain of claim 77 wherein said thioredoxin is soybean thioredoxin *h*.

Claim 122 (New): The transgenic plant of claim 32 wherein said thioredoxin is tobacco thioredoxin *h*.

Claim 123 (New): The transgenic plant of claim 32 wherein said thioredoxin is *Brassica* thioredoxin *h*.

Claim 124 (New): The transgenic monocot seed or grain of claim 77 wherein said thioredoxin is tobacco thioredoxin *h*.

Claim 125 (New): The transgenic monocot seed or grain of claim 77 wherein said thioredoxin is brassica thioredoxin *h*.